DOCUMENT RESUME

ED 249 835 HE 017 721

AUTHOR Murray, David R.
TITLE Telecourses and Learning Laboratory Utilization: A Survey to Identify the Learner Population and Their Utilization Patterns for Long Range Planning.
PUB DATE [84]
NOTE 24p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adult Students; Distance Education; *Enrollment Influences; Higher Education; Institutional Research; *Learning Laboratories; Program Evaluation; *Student Characteristics; *Telecourses; *Use Studies
IDENTIFIERS *University of Kentucky

ABSTRACT

Information on a telecourse program at the University of Kentucky is provided, based on a survey of the user population of the media-base educational program. This population consisted of 88 adult learners and other more nontraditional students. The telecourses were one component of the instructional system, which included printed materials, seminars, and academic support services. Generally, the survey provided insights into some of the educational opportunities afforded these students through the use of telecourses within a learning laboratory. The following characteristics of the students are identified: age group distributions; class standing (freshman, sophomore, junior, senior, graduate, and other); marital status; and type of occupation. Information on utilization patterns (i.e., frequency of lab visits and number of tapes used per visit) is also presented. Reasons for course enrollment are identified, as are reasons for utilizing the learning laboratory facility. Finally, strengths and weaknesses of the program, and implications for the future of the program are discussed. (SW)

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TELECOURSES AND LEARNING LABORATORY UTILIZATION

A Survey to Identify the Learner Population and Their Utilization Patterns for Long Range Planning

by: Dr. David R. Murray
Associate Director for Instructional
Development (Academic Affairs)

University of Kentucky
Lexington, KY 40506-0045

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TELECOURSES AND LEARNING LABORATORY UTILIZATION

A Survey to Identify the Learner Population and Their Utilization Patterns for Long Range Planning

by

Dr. David R. Murray
University of Kentucky

Abstract:

This article is based on a survey conducted at the University of Kentucky. Basically, the survey identified the user population of a media based educational program. This population consisted of adult learners and other more nontraditional students. Generally, the survey provided insights into some of the educational opportunities that were afforded these students through the use of telecourses within a Learning Laboratory. This article reflects various descriptions of the telecourse program, student demographic data, utilization patterns, reasons for course enrollment and reasons for utilization of the Learning Laboratory facility. The article also provides an overview of some of the identified strengths and weaknesses of the program and suggests possible areas for improvement.

The article clearly cites the advantages that a Learning Laboratory environment affords in the support of adult learning and continuing education.

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INTRODUCTION

In recent times, enrollments at many colleges and universities across the country have declined. The traditional age group ranging from 18 to 24 years of age has, in many cases, decided to defer their education or enroll on a part-time basis. The economic conditions of this country have, no doubt, had a great deal of influence on this. At the same time, there has been an increase in older student enrollment. Many adult learners are returning to school for specific skills or personal enhancement. They usually elect courses that provide them with the most flexibility so that they can meet their regular employment and personal commitments and, at the same time, continue their education.

The University of Kentucky has recognized this change in student needs and took the appropriate steps to develop a media based education program with the use of telecourses.

To provide optimum flexibility, the courses were offered over the local cable system through the Appalachian Community Service Network, the Kentucky Educational Television Network and they were also placed on reserve in the Learning Laboratory on the University of Kentucky campus.

This program involved the contributions of several departments within the University and efforts were made to work together on all aspects of the telecourse program. Instructional materials

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were duplicated, trips were made and mutual assistance procedures were established. A fluid exchange of ideas concerning concepts, logistics and marketing strategies were paramount during the developmental stages of the program.

The Learning Laboratory played an important roll in the overall success of the program. During the first term, the Learning Laboratory provided services that included an average of 145 viewings per week. Over one-third of the students enrolled in the University's telecourse program depended on the Learning Laboratory for both first time viewing or replays.

The demands were so great that evening hours were established and a graduate student was retained to coordinate the laboratory during that time. Funding was provided by the Evening Class Program of University Extension for this position.

Description of the Telecourses:

The telecourses offered were one component of the instructional system. Each instructional system was composed of television programs, printed materials, seminars and various academic support services.

The television programs for the most part included 30 half-hour sequential segments. Some of the titles included were: Cosmos (Astronomy), Making it Count (Computer Science), Dealing in Disciplines (Education), Simple Gifts (Gifted Education), Communication Through Literature (English), Shakespeare (English), Family Portrait (Sociology), Understanding Human

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Behavior (Psychology) and American Government Survey (Government).

Printed materials for each program included a textbook, a student study guide for the televised courses, related readings and faculty handouts. Whenever feasible, copies of these materials were placed on reserve in the Learning Laboratory. Students could read the materials at their leisure or refer to them when viewing the telecourses.

Required seminars were held periodically throughout the duration of the courses to provide a certain amount of faculty-student contact. These seminars were used to offer forms of discussion and to introduce concepts not covered within the telecourse programs themselves. Testing schedules were also established. Whenever possible, the faculty were encouraged to use our preview facilities and classroom in the Learning Center. Videotapes were provided for class discussions upon request.

The Survey:

In accordance with the evaluation plan set forth in the Learning Laboratory proposal, a User Survey was developed. The survey questionnaire was designed in order to generally identify the user and to solicit comments on the value of the Learning Laboratory as it relates to the learner's needs and experiences.

Method Rationale:

Virtually all of the related literature was of the descriptive

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survey type. The survey technique, the most widely used procedure for interrogating a subject population and measuring some specific set of responses, was recommended by Meyers and Grossen of Sacramento, state of California. They suggested that:

> "At the very least, it can supply information regarding the opinions, attitudes, etc., of a population on a given issue... it may provide a basis for deciding how to deal with certain issues."

From approximately 114 registered users, 88 elected to fill out the questionnaire. The questionnaire consisted of fifteen questions. The questions related to obtaining demographic data, utilization information and a free response category. The free response category provided comments on the general value of the program and any other information that clients felt would help to improve conditions and services.

Lawrence Meyers and Neal Grossen, Behavioral Research: Theory Procedures and Design (San Francisco: W.H. Freeman & Co., 1974) p. 175

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The applications of the survey relates to practice rather than theory. For this reason, the report will adopt a different emphasis from scientific and research oriented approach and will define project objectives.

Project Objectives:

The objectives of the survey and interview activities were defined to provide a sense of direction to the project. They were as follows:

To determine the chronological age of the telecourse students and what age group they represent.

To identify the user population in terms of their class standing and/or academic classifications.

To determine the user populations marital status and identify special needs.

To determine the broad range of occupational classifications and other related data.

To identify user patterns in regards to actual laboratory visitations.

To determine patterns of actual tapes requested per viewing.

To investigate the user's possible reasons for enrolling in a telecourse.

To investigate the user populations reason for using the

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Learning Laboratory.

To identify the many strengths of the telecourse program and its various supporting elements.

To identify possible weaknesses in the program for future development.

To identify the level of interest in telecourses in the business and industrial community.

Limitations:

Limitations were also established. From its conception, the project interfaced with many people, departments and locations. Administrators, faculty, technicians, clerical staff, work-study students, graduate assistants and a host of others contributed to the overall success of the project. Due to this magnitude and complexity, it would be almost impossible to communicate for each counterpart. Therefore, the following limitations were established.

The survey will be limited to addressing the predefined objectives.

The survey will be limited to the major activities of Audio-Visual Services and our efforts towards meeting our clientele's needs within the Learning Lab.

The survey will not present in depth activities of University Extension, Telecable of Lexington, Inc., or

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supporting production activities.

PART I

STUDENT DEMOGRAPHIC DATA

Students enrolled in the program were from many diverse backgrounds. Many social, economic and racial groups were represented. Two Donovan Scholars (senior citizen fellows) were also among the users. An overview of the users by age group distribution is reflected in Table 1, class standing is indicated in Table 2 and marital status is indicated in Table 3. Finally, in this section, occupational classifications are indicated in Table 4.

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Age Span:

The age span of the students previewing telecourses within the Learning Laboratory ranged from 17 to 74 years of age.

TABLE 1

AGE GROUP DISTRIBUTION

Age Group	No. of Students	% of Total
17 - 20	17	19.3
21 - 25	26	29.5
26 - 30	15	17.1
31 - 35	13	14.8
36 - 40	8	9.1
41 - 45	4	4.5
Over 45	5	5.7
Mean Age: 28.6	Median: 26	Mode: 21

Given the mean age of 28.6 and median age of 26, it would appear to indicate that the older student capitalizes on the use of the facility and the programs that are on reserve. This does reflect current national trends represented in the literature of telecommunications and adult continuing education.

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Class Standing:

The majority of students were found to be upper class students or non-classified participants.

TABLE 2

CLASS STANDING

Class	No. of Students	% of Total
Freshman	9	10.2
Sophomore	12	13.6
Junior	17	19.3
Senior	20	22.7
Graduate	12	13.6
Other	18	20.6

Marital Status:

Many of the married students had indicated that the Laboratory provided "quiet time" which they did not have at home. This helped them in their concentration on their studies. Also, a large group of married students indicated that flexibility in hours was needed in order to meet family obligations.

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TABLE 3

MARITAL STATUS

Classification	No. of Students	% of Total
Single	44	50.0
Married	31	35.6
Divorced	12	13.8
Parents	15	17.2

Nine single parents (10.3% of the total) were identified. Generally, the members of this group were taking courses to develop or improve skills for employment reasons.

Occupational Classifications:

The survey indicated that over half of the user population were employed in full time positions. Also, several full time students had indicated that they held part-time positions.

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TABLE 4

OCCUPATIONAL CLASSIFICATIONS

Classification	No. of Students	% of Total
Full time student	39	44.3
Business/Sales	4	4.5
Technical	8	9.1
Clerical	4	4.5
Education	15	17.0
Health	7	8.0
Service	3	3.4
Housewife	8	9.1

There were 14 university employees (12 different departments) representing 15.9% of the total population. University of Kentucky employees found the Laboratory to be extremely convenient. Many used the Laboratory during their lunch break.

PART II

UTILIZATION OF SERVICES

Only two of the total population had ever taken a telecourse before. They indicated that they had taken them through another educational institution. The remainder were first-time telecourse students.

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User Patterns:

Among those students who answered the questionnaire, 25% indicated that this was the first time in the Lab and therefore, were unable to estimate how many times they would be using the Laboratory during the term. The majority of the students (43.2%) indicated that they used the Laboratory once a week.

TABLE 5

USER PATTERNS

Times Used	No. of Students	% of Total
Once a week	38	43.2
Twice a week	8	9.1
Every two weeks	7	8.0
Varying patterns	13	14.8
No pattern established	22	25.0

Tapes requested per viewing, varied. This would indicate that the user would only view what information he or she could absorb during any given period.

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TABLE 6

TAPES REQUESTED PER VIEWING

No. of Tapes	No. of Students	% of Total
1	13	15.9
2	31	37.8
3	12	14.6
4	5	6.1
-	22*	26.8

*22 students were unable to answer the question because they had not established a pattern as of that time.

More than half of the user group (58.5%) viewed two or more 30 minute tapes at one sitting. This would indicate that they used the carrels at one hour intervals.

Reasons for Taking a Telecourse:

The majority of the users (69.3%) indicated that course credit towards a degree was the major factor in enrolling in the telecourse program. Many of them had also indicated that they enrolled to upgrade their professional skills.

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TABLE 7

REASON FOR TELECOURSE ENROLLMENT

Reason	No. of Students	% of Total
Credit towards a degree	61	69.3
Required for Promotion	3	3.4
Personal enjoyment	25	28.4
Upgrade professional skills	29	33.0
Learn new skills	8	9.1

Several answered more than one reason. Ten faculty members also viewed tapes for class preparation.

Clearly 45.5% of the responses indicated professional reasons not related to degree credit for enrolling in the telecourses. Upgrading professional skills or learning new skills such as those in the computer science area are extremely important. Verbally, many students had inquired about the possibility of UK offering management courses, economic and sales courses via videotape. Mathematics and biological sciences were also among their interests.

Reasons for Laboratory Use:

The following reasons were given in order of importance as

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indicated by numerical rankings on the questionnaire:

TABLE 8

*REASON FOR LABORATORY USE IN ORDER OF IMPORTANCE

Reason	Weighted Value
Flexible time convenience	2.0
No cable	2.9
Replay of materials	3.0
Missed broadcast	3.1
Self-pacing	3.2
Lab environment	3.7
Friendly service	3.9
Supporting materials	4.2
Technical problems with broadcast	4.4
Ability to preview other telecourses	5.1

*low weighted value indicates most important items (2.0)
high weighted value indicates less important items (5.1)

Flexibility of time appears to be the most important factor. A large group of users indicated that they did not have access to cable broadcasts and, therefore, relied on the Laboratory for viewing purposes. The capability of replaying materials was also significantly important.

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Time Convenience:

Although the majority of the users surveyed indicated that the hours of operation were convenient, many also requested later evening and Saturday hours.

During the established operating hours, carrels were usually available. However, over 18% had indicated that they were asked to wait for a vacancy. The average waiting time was cited to be 10 minutes or more.

Strengths:

Perhaps the two major factors that our user population cited as strengths are the time convenience and the ability to be in control of his or her own learning rate. One student indicated in the free response category that, "I think it's fantastic!" She goes on to say, "It gives me a chance to see programs I may never get a chance to see at the time that is most convenient for me." Another student stated, "It's very convenient to have the video player units so I can push the controls quickly and easily" and "I use the pause button a lot." Further on she said, "I would like to see more classes made available through television; they allow the student to view at his or her own rate flexibility and provide good electives."

Virtually all the users who took time to comment on our staff indicated that they were very pleased with the kind of personable services that we in the Center were striving for. They stated that..."personnel are very nice and accommodating...very

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cooperative and friendly...helpful and courteous...knowledgeable and informative." In fact, many of the students had indicated that they planned to use the lab more frequently because of the supportive features such as our staff and the laboratory itself.

Weaknesses:

Several of the students had often indicated that more evening hours during the week and Saturday hours were needed. Over half of the user population (56.7%) hold full time employment. Also, many of the others indicated that they held part-time jobs during the day. More evening hours and Saturday hours would extend viewing times so that they could schedule their courses of study around their work.

Complaints on cablecasting indicated some dissatisfaction. Some of the telecourse students depended on the cablecasts for viewing their programs. Sometimes the new automated directors which were designed to provide an automatic videotape feed to the videotape players at preselected times missed their cues and on occasion, the machines would jam. Like any new machinery, the bugs needed to be worked out. A few minor adjustments over the period of a semester took care of most of the problems.

During the first part of the semester, volume control of the tape players in the Learning Laboratory was a problem. Shortly after the problem was identified, we purchased headsets that had volume controls located on the earphones. Each side could be controlled separately. The new sets remedied the problem and the

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telecourse students appeared to have adjusted to the new sets.

Future Developments:

Early in the program, it became obvious that the telecourse program, because of its unique characteristics, would be of great interest and value to the physically handicapped. The program afforded home bound students with a way of obtaining college credit at home and yet still have some student interaction on campus when desired through the Learning Laboratory and in the required seminars. In the future, our facilities should be examined to identify any problems of access and other needs specifically related to the handicapped.

In the near future, we should identify the needs of business and the industrial community and determine their awareness level and attitude towards the use of telecourses. Furthermore, we should contact corporate educational centers and deposit tapes there for their employees to use at the work setting. In short, we should make our programs convenient for all levels of the working population and on all three working shifts. Telecourses can do this with a minimum amount of difficulty.

I believe that if universities cultivate these interests, sizable amounts of financial support could very well be donated. Therefore, our expertise should be shared with the corporations in the area. We should encourage them to develop their Learning Centers and we should continue to bring our instructors and resources to the plants themselves. If this is done properly,

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universities should find a willing partner with business and industry in general.

Possible Areas for Internal Improvement:

Emphasis should be placed on the instructional design of the materials to insure educational validity. The importance of the design of the learning message and the development of the software is paramount. The design of the user's guide, course syllabus, tests and other supporting materials should also be important. They can influence the effectiveness of independent learning.

The quality of educational programs should always be a consideration. For this reason, the services and programs provided in the Learning Laboratory should be linked with research projects. These projects should be directed towards providing feedback to us for future program development. They should also be concerned about the evaluation of learning outcomes. In this way we will be able to provide a certain amount of accountability to justify the outlay of capital funding and any other expenditures we may accrue.

To assist traditional faculty who wish to sponsor telecourses, a faculty development program should be developed. Adequate funding for resource materials should be provided for workshops and other related activities. The faculty will need this training to adjust to the role change. That is to say, the faculty member who traditionally is a presenter will change to

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the role of a developer and an engineer of learning experiences. They will need both formal instruction and individualized assistance via consultations to introduce them to the various technologies and learning systems that are available.

CONCLUSIONS

If one review the literature in education, one cannot help but notice that a trend towards a greater emphasis on extensive individualization of instruction is emerging. This report clearly demonstrates that we at the University of Kentucky are part of that trend. The important role that instructional technology will play in this movement is obvious. What is not so obvious is the fact that the burden or responsibility will be placed directly on our educators and learning resource personnel to develop and provide quality education of proven value for the adult learner. Adult learners are consumers and do discriminate. Therefore, accountability levels may ultimately be the deciding factor in the future success of our program.

We must select and develop scientifically designed and educationally relevant instructional materials. We must also continue to examine applied research in the field that can readily be transferable to the operational levels of our educational endeavors. Given all these variables, I believe that telecourses and other forms of applied technology towards individualization of instruction will continue to grow. Furthermore, if these variables are addressed in a proper way,

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our program at the University of Kentucky may very well hold its own and assume national prominence.

Dr. David R. Murray is the Associate Director for Instructional Development, Office of the Vice Chancellor for Academic Affairs, on special assignment to the Computing Center, University of Kentucky, Lexington, Kentucky 40506-0045, (606) 257-2900 ext. 244.

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